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State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

November 21, 2014

Robert Hicken
Mountain Valley Stone, Inc.
P.O. Box 985
2275 South Daniels Road
Heber City, Utah 84032

Subject: Fifth Review of Notice of Intention to Commence Large Mining Operations, First Review of 10-Acre Amendment, Mountain Valley Stone, Inc., Browns Canyon Quarry, M/043/0019, Summit County, Utah

Dear Mr. Hicken:

The Division of Oil, Gas and Mining reviewed an amendment to the Brown's Canyon quarry Notice of Intention to Commence Large Mining Operations, located in Summit County, Utah, which was received November 18, 2014. The attached comments will need to be adequately addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages of the original mining notice. After the notice is determined technically complete and the Division is prepared to issue final approval for the amendment, the Division will request two copies. Upon final approval, they will be stamped approved, and one will be returned for your records.

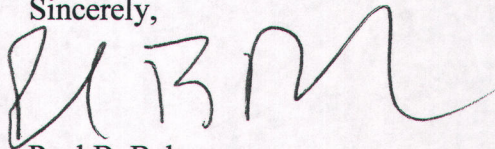
Certain parts of this proposal are incomplete at this time, such as the soils inventory. The application includes commitments to salvage a certain amount of soil, and this review requires a commitment to meet the operation practices standards in R647-4-107. The application also includes a commitment to not disturb wetland areas. **Any additional required wetland inventory information or soils information must be included in the plan no later than June 15, 2015.**

Please note also that Division approval of any mining operation does not negate the requirement to obtain other appropriate approvals although the Division does not enforce other agencies' requirements.

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Robert Hicken
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November 21, 2014

The Division will suspend further review of the Notice of Intention until your response to this letter is received. Please contact Leslie Heppler at 801-538-5257 or me at 801-538-5261 if you have questions about this review or if you would like to meet and discuss any of the issues. Thank you for your cooperation in completing this permitting action.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. B. Baker', with a stylized, flowing script.

Paul B. Baker
Minerals Program Manager

PBB: lah: eb
Attachment: Review
Cc: SLewis@summitcounty.org
P:\GROUPS\MINERALS\WP\M043-Summit\M0430019-BrownsCyn-MVS\Final\REV5-6334-11202014.doc

**FIFTH REVIEW OF NOTICE OF INTENTION
 FIRST REVIEW OF 10 ACRE AMENDMENT
 TO COMMENCE LARGE MINING OPERATIONS**

**Mountain Valley Stone
 Browns Canyon Quarry Mine
 M/043/0019
 November 21, 2014**

General Comments:

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
1	General	Submittal should be formatted to easily incorporate additional revisions and amendments. (No response needed.)	lah	
2	All	The Division may have additional comments as more information is received. While the Division attempted to review the proposal as thoroughly as possible, there could be additional comments because the review was expedited at the operator's request. (No response needed.)	lah	
3	Appendix page 4	Add rule 109.5 to the Table of Contents.	lah	
4	Page 7 para 3	For clarification, please add the permit identification numbers to the sentence.	lah	

R647-4-105 - Maps, Drawings & Photographs

105.2 Surface facilities map

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
5	Figure 4	This map needs to tie to the bond calculation demolition worksheets.	lah	

105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
6	Figure 6	More cross sections are needed. Add at a minimum one cross section and one long section for each pit.	lah	

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5th Review of entire plan, 1st Review of current amendment

M/043/0019

November 21, 2014

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
7	Figures 5 and 6	These figures show 37-degree (angle of repose) slopes. It is very unlikely that adequate vegetation can be established on slopes this steep and that the postmining land use can be achieved. Please show methods to revegetate slopes and achieve the land use.	lah	
8	Figure 7a	The entire water shed needs to be included.	lah	
9	Figure 7d	Please add erosion control features to the map. The Division suggests berms with rock check dams would be the best alternative control. Since the storage is a large flat area, it makes sense to direct the runoff to certain erosion control points with a perimeter berm.	lah	

R647-4-106 - Operation Plan

106.5 & 106.6 Soils and Vegetation

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
10	Page 15	The operator commits to doing a soil survey in the spring of 2015, but this would likely be after the area is disturbed. Please include a commitment to salvage suitable soil materials. This must not be limited to 4-6 inches where additional suitable soil is available, so this commitment in the plan needs to be modified.	pbb	

R647-4-109 - Impact Assessment

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
11	109.1, 109.2, 109.3 109.4	Add a statement to each section showing how the impacts to the resources will be mitigated. "Impacts to ___ will be mitigated by ___."	lah and pbb	

R647-4-113 – Surety

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
12	Appendix H	The surety calculations do not account for the facilities and crusher on site.	lah	
13	Appendix H	Please submit surety calculations in the Division's format, but see comment 14 below.	lah	

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
14	Appendix H	<p>The operator has proposed to increase the surety based on the current cost estimate, but though the Division accepted this figure, it was not based on detailed calculations and may not be adequate.</p> <p>The Division recently received a reclamation cost estimate for another operation (Beef Hollow) and suggests the cost per acre for reclaiming this operation is more realistic for the Brown's Canyon expansion. Once demolition has been removed, the cost per acre for this site is \$11,054. This is calculated as follows:</p> <p>\$8213 cost per acre before indirect costs and escalation</p> <p>Indirect costs: 26.8%: 10% mob/demob, 5% contingency, 2.5% engineering redesign, 6.8% main office expense, 2.5% project management</p> <p>Escalation: 1.2%/year for five years</p> <p>$\\$8213 * 1.268 * 1.012^5 = \\$11,054$</p> <p>For a 10-acre expansion, the additional surety would be \$110,540 plus the cost for removal of facilities and the crusher (see comment 12). Until a detailed reclamation cost estimate can be calculated, the Division would be willing to accept this amount.</p>	pbb	